

...about five miles south of the banks of the Upper Salado, and not far from the ranch of the well-known scout, Archie McIntosh, there are two cave dwellings of moderate dimensions, the architecture of which is that of typical compact pueblos. Each cave is occupied by one house, and each of these houses is at least two stories high, the stories retreating from the bottom to the top, after the manner of New Mexican pueblo houses. Roofs, ceilings, doorways, hatchways, are still mostly intact, and although many of the beams have been burnt by the apaches, enough are left to give an idea of that feature also. The rooms are somewhat larger than those in most one-house pueblo ruins farther north, as might be expected, since the caves are very warm in summer; but the walls are identical in composition and structure, and the floors also. Each cave dwelling would be just as much in place at the Chaco Canyon, or on the Rio de las Animas, as in the rocky recesses of the valley of Salt River. The terraced form was in this case imposed by the arched rear wall and the roof of the caves, and was the result of accommodation to the shelter sought in the cavities. The presence of hatchways in the upper stories indicates that ladders, not stairways, were used for communicating between the upper and the lower floors.

The caves lie on a very steep slope, in some parts even perpendicular. Their elevation above the bottom of the narrow gulch from which the slope arises is about four hundred feet, and the acclivity, besides the number of boulders and rocky fragments with which it is covered, is rendered still more difficult of ascent by a profuse growth of *Cylindropuntiae* called Chollas, a dangerously thorny species of cactus. The bottom contains a spring, and is shaded by cottonwoods and dense thickets. The caves face to the east, and are visible at quite a distance from the river bottom. Approach to them was difficult for an enemy, and the buildings so completely fill the cavities, that only narrow passages lead to the rear of the houses, where they could be entered. But here, as well as at the Upper Gila, it was easy to cut off the water supply, and thus to reduce the inhabitants. There are no tillable spots nearer than the river, so that it may be that they had to go several miles in order to raise their crops. It is well known that such a distance is not an insurmountable obstacle for the sedentary natives.

Owing to the sheltered situation of these cave dwellings many specimens of their industry, manufactured out of the most perishable material, have remained intact. Sandals like those from the Tze-yi, yucca fibre and thread, and, above all, specimens of cotton cloth, were found here. Of the latter I have seen much and some of it shows traces of "drawn work". The ancient inhabitants of Upper Salt River valley had cotton, but it does not follow with absolute certainty that they cultivated it themselves; still this is quite probable, for the climate is such as to permit the growth of the plant there much better than among the Moquis and we know that the Moquis raised cotton in the sixteenth and seventeenth centuries. The pottery found in the caves is in no manner different from that accompanying other ruins on Salt River, and all the other artificial objects are also similar. The general culture was therefore the same, and nothing tends to show that the difference in architecture implied also a different people. This does not prove that the tribe built the checker-board ruins near the river, and the cave dwellings on the mountain slopes. They may have been distinct tribes or may have lived contemporaneously, or the cave dwellers may have descended into the valley and reared their abodes there, or the valley people may have withdrawn to the caves as their last refuge. But both belonged to the same culture group, and the difference in mode of dwelling was not one imported, but one created locally by necessity, or by natural opportunities. The fact that certain very perishable articles were found in the caves, and not in the partially ransacked ruin near Armour's, does not militate against this, for cloth and pottery of all sorts deteriorate much more rapidly in the ground or in rubbish than they do inside rock shelters; and this is especially the case where, as in this instance, the buildings under these shelters are still in an almost perfect state of preservation. The nutritive plants collected at both places were the same, corn and beans.